

CSE 194 Project Overview

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- A 1-page summary of what you want your project's audience to know in order to appreciate and/or use it.

In the book *Invisible Women*, the author Caroline Criado Perez discusses that “decades of research [...] show that teaching evaluation forms are worse than useless at actually evaluating teaching and are in fact ‘biased against female instructors by an amount that is large and statistically significant’” Based on this claim we researched student evaluations on CAPES at UC San Diego and see if we are able to identify any biases in student expectations of women vs men professors.

Our primary motivation was our personal experiences as women computer scientists who want to pursue higher education (Master's degree, PhD, etc). There are very few women who are computer science professors and learning about the explicit and implicit bias they face will be critical as we continue in academia. We have personally seen the benefits of women role models especially in roles like professors and teachers and we hope to bring light to these inequities.

We hope that our audience will be able to explore some of the analysis we conducted and determine why we got the results we did. In addition, the audience would benefit from viewing the concerns we had and ultimately contributing by brainstorming ways to address these issues. By building off our initial results and concerns we will hopefully have a result which more accurately reflects the sentiments of students towards professors.

Even though our results ended up not statistically significant in the way we anticipated, this project will hopefully enable people to be aware of any implicit biases they may have. Additionally, it will suggest to students and anyone referring to CAPES and other evaluation tools that they should not jump to conclusions about the results of those evaluations, as there may be hidden biases against women baked into the results of those evaluations as a result of explicit and implicit biases.

- A brief (several sentences) description of what you would do with more time on your project, or as a followup project that builds on it.

In a future iteration of this project, ideally, we would collect gender identity from each professor individually or through reputable records. Additionally, we would normalize the data and take into account multiple confounding variables: students who do not fill out CAPES, mismatch data size etc. As listed in the concerns section of our project, we would also change the data cleaning so that we do not average data across time. We also collected additional data that we hope to analyze in the future, including the means for professors' proficiency in material and ability to explain material well. All in all, there are many concerns that we had throughout completing our research. Although we recognize this may be challenging without access to the necessary data, in future we hope to address the things discussed in this section.

- Your original plan and milestone documents.

[Original Project Plan](#)

[Project Milestone](#)

- Any supporting documents and resources needed to understand your project (for example, a Github repository if code is involved, or any surveys or spreadsheets of data you used in analysis)

[Github Repository](#)

- Includes main Jupyter notebook (`Project.ipynb`)
- Includes Jupyter notebooks used to get CAPE data (`get_capes_data.ipynb`)
- Includes CAPE .csv files we used (`capes` folder)
- Includes other CAPE .csv files we did not use (`other_capes` folder), keeping for possible future work